



REMARKS

Reconsideration and allowance of the subject application are respectfully requested. By this Amendment, claim 1 has been amended to include the subject matter of claims 4 and 5, and the dependency of claims 6 and 7 has been appropriately adjusted. Claims 4 and 5 have been canceled without prejudice or disclaimer. Thus, claims 1-3 and 6-12 are all the claims pending in the application. Applicant respectfully submits that the pending claims define patentable subject matter.

CLAIM REJECTIONS - 35 U.S.C. § 102

Claims 1-8 and 11 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Ishihara et al. (U.S. 2003/0048072). Applicant respectfully traverses the 35 U.S.C. § 102 rejection of the claims, as set forth below.

Amended claim 1 recites:

A light-emitting element which emits light itself, comprising:

a light-emitting portion having a higher refractive index than a refractive index of air; and

a diffraction grating structure provided to a light-emitting side surface of the light-emitting portion,

wherein a minimum light-emission value is equal to or less than 50% of a maximum light-emission value when white light is emitted from said light-emitting portion,

wherein said light-emitting portion includes light-emitting materials for at least two primary colors which emit the white light among light-emitting materials for three primary colors, and

wherein a light-emission ratio of the light-emitting materials for said at least two primary colors among the light-emitting materials for the three primary colors is adjusted to make the minimum light-emission value equal to or less than 50% of the maximum light-emission value when the white light is emitted from said light-emitting portion.

In response to arguments in the previously filed Response (December 20, 2005), the Examiner notes “that the features upon which applicant relies (i.e., “a minimum light-emission value is equal to or less than 50% of a maximum light-emission value”) the general conditions of the claim are disclosed in the prior art, (e.g., Ishihara et al. U.S. 2003/0048072), where in paragraph [0060; "... the light is not affected by the classic optics ... there is no loss due to total reflection, improving the light extraction efficiency...etc."]. From the following paragraph, the maximum value is considered to be near 100%. The examiner believes a minimum light-emission value is equal to or less than 50% of a maximum light-emission value is clearly taught by the prior art (underlined).” (Office Action, pages 10 and 11)

Applicant submits that paragraph [0060] of Ishihara does not teach or suggest that a minimum light-emission value is equal to 50% of a maximum light-emission value or that a minimum light emission value is less than 50% of a maximum light-emission value. The Examiner’s unsupportable extension of paragraph [0060] beyond what it explicitly or implicitly discloses is purely based on speculation. Even if “the light is not affected by the classic optics” and even if “there is no loss due to total reflection”, paragraph [0060] makes no disclosure regarding a minimum light-emission value as a ratio of a maximum light-emission value.

Even assuming, *arguendo*, that the maximum light-emission value is at (or near) 100%, the Examiner provides no basis for his presumption that “a minimum light-emission value is equal to or less than 50% of a maximum light-emission value is clearly taught by the prior art”. Indeed, there is no implicit or explicit disclosure in Ishihara regarding the minimum light-emission value being any percentage of the maximum light-emission value.

A fortiori, Ishihara fails to teach or suggest a light-emission ratio of the light-emitting materials for said at least two primary colors among the light-emitting materials for the three primary colors is adjusted to make the minimum light-emission value equal to or less than 50% of the maximum light-emission value when the white light is emitted from said light-emitting portion, as recited in claim 1. Ishihara is completely silent with respect to *two primary colors among the light-emitting materials for the three primary colors* being used to make the minimum light-emission value be 50% or less than the maximum light-emission value, and these features do not read on paragraphs [0029], [0117], [0120] and [0060] of Ishihara.

Further, Ishihara fails to teach or suggest that said light-emitting portion includes light-emitting materials for at least two primary colors which emit the white light among light-emitting materials for three primary colors, as recited in claim 1. Although the Examiner cites to paragraphs [0029], [0117], and [0120] for teaching these features, Applicant submits that these features of claim 1 do not read on the cited paragraphs of Ishihara.

For at least the foregoing reasons, claim 1 is not anticipated or rendered obvious by the teaching of Ishihara. Therefore, the 35 U.S.C. § 102 rejection of claims 1-3 and 6-12 should be withdrawn.

CLAIM REJECTIONS - 35 U.S.C. § 103

A. Claims 1-12 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kobori (U.S. Patent No. 6,327,554) in view of ODA et al. (U.S. 2002/0180348). Applicant respectfully traverses the 35 U.S.C. § 103 rejection of the claims, as set forth below.

The Examiner presupposes that “Kobori discloses a light-emitting portion having a higher refractive index than a refractive index of air [7, 8], wherein a minimum light-emission value is equal to or less than 50% of a maximum light-emission value when white light is emitted from the light-emitting portion.” (Office Action, page 5)

Further, with regard to the previously filed Response (December 20, 2005), the Examiner mistakenly thinks Applicant argued that claim 1 requires “the electron ejecting electrode..[to be] emitting light itself that is a minimum light-emission value equal to or less than 50% of a maximum light-emission value when white light is emitted” (Office Action, page 11). However, the Examiner is incorrect.

Applicant submits that the electron ejecting electrode in Kobori is not a light-emitting portion and the light-emitting portion of claim 1 does not read on the electron ejecting electrode in Kobori. **The electron ejecting electrode does not emit light, but is an electrode for providing electrons.** Therefore, any discussion of the electron injecting electrode having a reflectance of at least 50%, which is taught in col. 8, lines 23-25, is irrelevant because the electron ejecting electrode is not a light-emitting portion, as recited in claim 1.

Furthermore, the Examiner has not cited to any passage of Kobori which discloses “a minimum light-emission value is equal to or less than 50% of a maximum light-emission value when white light is emitted from said light-emitting portion”, as recited in claim 1. Similarly, there is no support for the Examiner’s position that the above-identified feature is taught in Kobori. Moreover, to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a) the Examiner must show that the prior art references, when combined, teach or suggest all of the

claim limitations. (MPEP § 2143) As a result, in order for the Examiner to maintain a rejection under either 35 U.S.C. § 102 or 103, the references must teach all of the limitations of the claims. Applicant submits that the Examiner has not clearly set forth a *prima facie* case of obviousness.

In addition, with regard to the combination of Kobori and ODA, the Examiner asserts "it would have been obvious to one of ordinary skill in the art at the time of the invention to modify teachings of Kobori with a diffraction grating element of ODA et al. to improve the light extraction efficiency of the device and its viewing angle..." (Office Action, page 5) Support for such an assertion, however, is not found in the references. Since Kobori fails to disclose a diffraction grating structure in its device, Applicant submits that there would have been no motivation to combine Kobori with ODA in an attempt to disclose the features of claim 1.

For at least the foregoing reasons, claim 1 is not anticipated or rendered obvious by the individual or combined teachings of Kobori and ODA (*along with Ishihara*). Therefore, the 35 U.S.C. § 103 rejection of claims 1-3 and 6-12 should be withdrawn.

B. Claims 9, 10, and 12 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ishihara et al. (U.S. 2003/0048072).

As discussed above, Ishihara is deficient vis-à-vis claim 1. Therefore, claims 9, 10, and 12 are patentable over Ishihara at least by virtue of their dependency from claim 1. For at least the foregoing reasons, the 35 U.S.C. § 103 rejection of claims 9, 10, and 12 should be withdrawn.

AMENDMENT UNDER 37 C.F.R. §1.116
U.S. Appln. No. 10/667,368

Attorney Docket No. Q75436

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

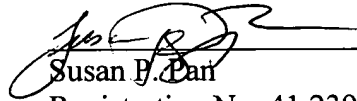
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